

etc. (Nakai, Fl. Sylv. Kor. 15: 28. 1926). It is against all usage to have names of subgenera in the adjectival form, but the present rules do not prevent this, therefore I propose here to eliminate the word "usually" in reference to subgenera in the first line of article 26. In the names of subsections and lower subdivisions usage varies widely and both forms of names are permitted by the rules, the only restriction should be that one and the same form should be used consistently in each category. The use of nouns for subdivisions, however, may sometimes be carried too far, as by Koehne who has proposed in *Prunus* names in the form of substantives even for series, e.g. *Prunus* subgen. *Cerasus* grex *Typocerasus* sect. *Cremastosepalum* subsect. *Pseudomahaleb* ser. *Cyclaminium* (in Sargent, Pl. Wilson, 1: 226-227. 1912).

RECOMMENDATION XI

(a) To give, where possible, to the principal subdivision of a genus a name which recalls that of the genus with some modification or addition. Thus *Eu* may be placed at the beginning of the generic name when it is of Greek origin, *-astrum*, *-ella* at the end of the name when Latin, or any other modification consistent with the grammar and usages of the Latin language.

PROPOSED CHANGE

(a) To give to the subdivision containing the *type species* of a genus preferably the name of the genus modified by the prefix "*Eu*" or to use the generic name without prefix; for other important subdivisions the generic name with the suffix *-ella* or *-astrum* or any other modification may be used.

Examples: Sect. *Eucardamine* Prantl (containing *Cardamine pratensis*, the type species of *Cardamine*); *Sorbus** *Sorbus* Pers. (containing *S. aucuparia*, the type species¹ of *Sorbus*); sect. *Cardaminella* Prantl (a second section besides the typical one); sect. *Trifolium* Ser. (not including the type species of the genus, which is *Trifolium pratense*, belonging to sect. *Eutriphyllum* Ser.) — See also Recom. XXXIV.

DISCUSSION

The recommendation, as it stands, does not take cognizance of the fact that the type concept is now one of the fundamental concepts of the Rules

¹Though in the List of lectotypes of Linnaean genera by A. S. Hitchcock and M. L. Green, *Sorbus domestica* is given as the standard-species, I pointed out in a letter sent January 5, 1937 to the Committee that *S. aucuparia* would be preferable as a lectotype for reasons I stated.

and that it should be made clear that generic names modified by the prefix *Eu* or the generic name without prefix, can only be used for the group containing the type or standard species. Whether the name to which *Eu* is to be prefixed is of Greek origin or not is irrelevant; *Deutzia* with sect. EUDEUTZIA Engl. is certainly not of Greek origin, nor is *Vaccinium* with the subgen. EUVACCINIUM Gray, nor *Rosa* with the subgen. EUROSA Focke.

RECOMMENDATION XI

(d) To avoid in coordinated subdivisions of a genus the use of names in the form of a noun together with those in the form of a plural adjective; the former should be used chiefly for subgenera and sections, the latter for subsections, series and subseries.

PROPOSED CHANGE

(d) To be omitted, since this paragraph has been incorporated in Art. 26.

ARTICLE 48 (3d paragraph)

Where a name and description by one author are published by another author, the word *apud* is used to connect the names of the two authors, except where the name of the second author forms part of the title of a book or periodical, in which case the connecting word *in* is used instead.

Examples: *Teucrium charidemi* Sandwith apud Lacaita (in Cavanillesia).

PROPOSED CHANGE

Where a name with a description or reference to a description by one author is published by another author, the word *in* is used to connect the names of the two authors (or if preferred *apud* may be used in the same sense).

Examples: *Teucrium charidemi* Sandwith in Lacaita (in Cavanillesia, 3: 38. 1930), the description of a species contributed by Sandwith and published in a paper by Lacaita printed in Cavanillesia; or *Teucrium charidemi* Sandwith in Cavanillesia, 3: 38 (1930). *Viburnum ternatum* Rehder in Sargent, Trees & Shrubs 2: 37 (1907).

DISCUSSION

The rule, as it stands, implies that in a full citation "in" is to be used, but in an abbreviated citation it should be changed to "apud," e.g.

Viburnum ternatum Rehder in Sargent, *Trees & Shrubs*, 2: 37 (1907), but *V. ternatum* Rehder apud Sargent, because in the latter case the name of the second author does not form part of the title of a book or periodical. Similarly, the connecting preposition in a citation of a reprint would be different from the citation of the original e.g. *Desmodium Handelii* Schindl. in Handel-Mazzetti, *Pl. Nov. Sin. Forts.* 37: 1 (1925), but *D. Handelii* Schindl. apud Handel-Mazzetti (in *Akad. Anzeig. Wiss. Wien* 62: 234, 1925). Such differences in one and the same citation depending on the more or less complete way of quoting are confusing and it is certainly advisable to use in both cases the usual and simpler preposition "in" instead of the more unusual and cumbersome looking "apud" even though the latter is better classical Latin.

ARTICLE 49

When a genus or a group of lower rank is altered in rank but retains its name or epithet, the original author must be cited in parenthesis, followed by the name of the author who effected the alteration. The same holds when a subdivision of a genus, a species, or a group of lower rank, is transferred to another genus or species with or without alteration of rank.

PROPOSED CHANGE

When a genus or a group of lower rank is altered in rank but retains its name or epithet, the author who first used the name *legitimately* must be cited in parenthesis followed by the name of the author who effected the alteration. The same holds when a subdivision of a genus, a species or a group of lower rank is transferred to another genus or species with or without alteration of rank.

Additional examples: *Syzygium lineatum* (DC.) Merrill & Perry, the transfer being based on the legitimate name *Jambosa lineata* DC., not on the earlier illegitimate *Myrtus lineata* Bl., not Sw. — *Lithocarpus polystachya* (Wall. ex A. DC.) Rehd. or *L. polystachya* (A. DC.) Rehd.

DISCUSSION

The article, as it stands, does not seem to be clear enough to prevent the citation of the author of an epithet in an illegitimate combination. In the first example cited above, *Myrtus lineata* Bl. is certainly the oldest name and Blume is the author of the original epithet, but the name is illegitimate being a later homonym of *M. lineata* Sw. If, however, Blume were cited as the original author in the combination *Syzygium lineatum*

Merr. & Perry (1938), the combination being based on an illegitimate name would be invalidated by the older synonym, *Syzygium longiflorum* Presl (1844); by replacing the parenthetical author "Blume" by the author of a legitimate combination, the new combination has been validated. The author who effects the change is the author of the new combination, even if he does not cite the correct parenthetical author or if he bases his name on an epithet in an illegitimate combination, as long as there is available a legitimate combination with the same epithet and based on the same type. A similar case is *Pseudotsuga taxifolia* (Poir.) Britt.; see under Art. 69. In the second example cited above, either the author of the name *and* the publishing author should be cited or, if an abbreviated citation is used, the publishing author is the one who should be cited according to Art. 48; the citation *Lithocarpus polystachya* (Wall.) Rehd. would be against Art. 48.

NEW RECOMMENDATION XXXI^{bis}

When citing a published name as a synonym, it should be cited as published, without alteration of gender, spelling, designation of categories or of a parenthetical author if given. When citing a nomen nudum, this should be indicated by adding *nom.* or *nom. nud.*

DISCUSSION

One should be able to rely on the correctness of the citation without having to turn to the original to find out the exact form of publication. In a citation of a botanical name, as in any other kind of citation, there should be no alteration, omission or insertion except if indicated in some way. An author has no right to make changes in a name he does not adopt, but cites only as a synonym of the accepted name, e.g. the name *Evonymus alatus* β. *subtriflora* (Bl.) Franch. & Sav. Enum. Pl. Jap. 2: 311 (1879), if cited under *Euonymus alata* var. *aptera* Regel¹ as a synonym, should be cited as published, not as *Euonymus alata* var. *subtriflora*; *Ribes Cynosbati* var. *glabratum* Fernald in *Rhodora*, 7: 156 (1905) if considered a synonym, should not be cited as *Ribes Cynosbati glabratum* Fernald, as done by Coville & Britton in *N. Am. Flora*, 22: 220 (1906). In a name he adopts an author has to make certain changes to have the name agree with his treatment, but the synonyms should be

¹Though published by Regel in *Mem. Acad. Sci. St. Pétersb.* VII, 4, 4: 41 (Tent. Fl. Ussur.) (1861) as *Evonymus alatus* Thbg. β. *apterus*, the author who adopts the name has to make it conform to the spelling and the gender used in his treatment of the genus; if it is desirable to give an exact citation of the original publication of the name, it should be cited in synonymy.

cited as published, e.g. *Acer Negundo* var. *interior* (Britt.) Sargent must be changed by the author who adopts this name to *A. Negundo* var. *interius* (Britt.) Sargent, because *Acer* is neuter, but Britton's original binomial if cited as a synonym, should be cited as *A. interior* Britt. If, however, an author should adopt Britton's name as representing a valid species, he should change it to *Acer interius* Britt., and Sargent's combination, if quoted as a synonym, should be cited "*Acer Negundo* var. *interior* Sarg." as published by Sargent.

The original spelling of the adopted name may be given in quotation marks after the citation, e.g. *Acer Negundo* var. *interius* (Britt.) Sargent in Bot. Gaz. 67: 239 (1919) as "*interior*."

ARTICLE 53

When a subdivision of a genus is transferred to another genus (or placed under another generic name for the same genus) *without change of rank*, its subdivisional name must be retained, or (if it has not been retained) must be re-established unless one of the following obstacles exists: (1) that the resulting association of names has been previously published validly for a different subdivision, or (2) that there is available an earlier and validly published subdivisional name of the same rank.

Example: *Saponaria* sect. *Vaccaria* DC., transferred to *Gypsophila*, becomes *Gypsophila* sect. *Vaccaria* (DC.) Godr.

PROPOSED CHANGE

When a subdivision of a genus is transferred to another genus (or placed under another generic name for the same genus) its subdivisional name must be retained or (if it has not been retained) must be re-established unless one of the following obstacles exists: (1) that the resulting association of names has been previously published validly for a different subdivision or (2) that there is available an earlier and validly published subdivisional name of the *same grammatical form* (either substantive or adjective in the plural number).

Example: *Saponaria* sect. *Vaccaria* Ser. in DC. Prodr. 1: 365 (1824) transferred to *Gypsophila* becomes *G.* sect. *Vaccaria* (DC.) Godr. in Gren. & Godr. Fl. France, 1: 227 (1848).

The example given presents a very clear case, since in both combinations the subdivision is designated as "sect.," but there are many cases where there is given no designation of rank at all, or designations other than those recognized in the Rules, as in the following example: *Cerasus* a. *Padus* [Moench] S. F. Gray, Nat. Arr. Brit. Pl. 2: 589 (1821);

enumerated under *Prunus* as *P. Rotte Padi* [Moench] Mertens & Koch, *Deutschl. Fl.* 3: 405 (1831), as *P. sect. Padi* Koch, *Syn. Fl. Germ.* 1: 207 (1837), as *P. subgen. Padus* [Moench] Koehne, *Dendr.* 303 (1893). Other examples of subdivisions without indication of rank are *Sorbus L.* * *Aria* Persoon, *Syn.* 2: 38 (1807); *Yucca* § 1 *Eu-yucca* * *Sarcocarpa* Engelm. in S. Watson, *Botany, King Rep.* 496 (1871).

Since in many instances the exact rank of the category is not indicated or the established systematic arrangement in the new position of a subdivisional name makes a change of rank necessary, it seems desirable to omit the words "without change of rank" which in this connection can mean only subdivisional rank. It is more important to prevent the coordination of names of a different grammatical form, substantives and adjectives in the plural number (see above under Art. 26).

ARTICLE 58

When a tribe becomes a family, when a subgenus or section becomes a genus, when a subdivision of a species becomes a species, or when the reverse of these changes takes place, *and in general when a group changes its rank*, the earliest legitimate name or epithet given to the group in its new rank is valid, unless that name or the resulting association or combination is a later homonym (see Art. 60, 61).

PROPOSED CHANGE

When a tribe becomes a family, when a subgenus or section becomes a genus, when a subdivision of a species becomes a species, or when the reverse of these changes takes place, the earliest legitimate name or epithet given to the group in its new rank is valid, unless that name or the resulting association or combination is a later homonym (see Art. 60, 61).

DISCUSSION

The phrase "and in general when a group changes its rank" is too sweeping and does not take into account the last sentence in Art. 55 concerning subdivisions of a species: "unless one of the following obstacles exists: . . . (2) that there is an earlier validly published subdivisional epithet available." The fact that reference is made simply to subdivisional epithets and not to "subdivisional epithets of the same rank" shows clearly that nomenclaturally all the subdivisions are considered as of equal rank. The same will apply to subdivisions of a genus, if the proposed change of Art. 53 (see above) is accepted. The change of Art. 53 will bring it into conformity with Art. 55 dealing with sub-

divisions of species, so that in both cases, in regard to the subdivisions of genera and to those of species, the same rule prevails.

ARTICLE 69

In cases foreseen in Art. 60-68 the name or epithet to be rejected is replaced by the oldest legitimate name, or (in a combination) by the oldest legitimate epithet which will be, in the new position, in accordance with the Rules. If none exists, a new name or epithet must be chosen. Where a new epithet is required, an author may, if he wishes, adopt an epithet previously given to the group in an illegitimate combination, if there is no obstacle to its employment in the new position or sense.

PROPOSED CHANGE

In cases foreseen in Art. 60-68 the name or epithet to be rejected is replaced by the oldest legitimate name, or (in a combination) by the oldest legitimate epithet which will be, in the new position, in accordance with the Rules. If none exists, a new name or epithet must be chosen. Where a new epithet is required, an author may, if he wishes, adopt an epithet previously given to the group in an illegitimate combination, if there is no obstacle to its employment in the new position or sense; *the resultant combination is treated as a new name.*

• DISCUSSION

It seems desirable to include in the article itself the statement made at the conclusion of the examples. Thus it is made clear that the case is exactly the same as if a new epithet were given. The transferred species or variety is based on the description given under the illegitimate name which is to be cited as a synonym, but its author should not be given as parenthetical author, since the epithet is to be treated as a new one. The objection that the reference to the original description of the group is lost if the author of an illegitimate name is not cited in parenthesis hardly holds, for if a new name is given, the author of the new name only is cited, though he is not the author of the description upon which the name rests. The reference to the original illegitimate name appears only in synonymy. Usually, it will make little difference, if the author of the illegitimate name is cited in parenthesis, but in the case of a second transfer, it becomes important to have it clearly indicated that the epithet is to be considered new; e.g. in the case of *Pseudotsuga taxifolia*. Lambert's name for this species was *Pinus taxifolia* (1803)

which is illegitimate as a later homonym of *P. taxifolia* Salisb. (1796), but in 1804 Poirlet transferred the species to *Abies* as *Abies taxifolia*. Since there was at that time no other legitimate name available for this species, he was, according to Art. 69, at liberty to make use of the epithet of the illegitimate binomial of Lambert. If Poirlet had not transferred in 1804 the epithet *taxifolia*, the next oldest specific epithet would be *Abies mucronata* Raf. (1832). *Abies taxifolia* is therefore a legitimate name and its epithet the oldest one available for this species. Britton, then, was right in adopting *taxifolia* as the oldest specific epithet, only he erred in basing it on the illegitimate name of Lambert. Britton's name, therefore, stands with the parenthetical author corrected to "(Poir.)," (Cf. Kew Bull. 1938:80) and the combination should be cited as *Pseudotsuga taxifolia* (Poir.) Britt., emend. or in a fuller citation the words "Rehder ex Sprague & Green" may be added. (See also Art. 49.)

ARTICLE 70

The original spelling of a name or epithet must be retained, except in the case of a typographic error, or of a clearly unintentional orthographic error. When the difference between two generic names lies in the termination, these names must be regarded as distinct, even though differing by one letter only. This does not apply to mere orthographic variants of the same name.

NOTE 2. The use of a wrong connecting vowel or vowels (or the omission of a connecting vowel in a specific epithet, or in that of a subdivision of a species) is treated as an unintentional orthographic error which may be corrected. (See Rec. XLIV.)

OMISSION OF NOTE 2 PROPOSED

DISCUSSION

This Note 2 of Article 70 has given rise to a number of changes in generic names and specific epithets or in those of a subdivision of a species which evidently were not intended by this rule. It was certainly not intended by this rule to advocate changes of generic names as *Cercidiphyllum* to *Cercidophyllum*, *Menispermum* to *Menospermum*, *Symphoricarpos* to *Symphorocarpus*, and of adjectival epithets as *atrophoricarpos* to *Symphorocarpus*, and of adjectival epithets as *atrosanguineus* to *atrisanguineus*, *atropurpureus* to *atripurpureus* (e.g., *Evonymus atripurpureus* in Mitt. Deutsch. Dendr. Ges. 39:194. 1928) *albo-variegatus* to *albi-variegatus*, *aurco-variegatus* to *aurci-variegatus* (e.g., *Fagus sil-*

vatica m. *aurci-variegata* Aschers. & Graebn. Syn. Mitteleur Fl. 4: 439. 1911).¹

The statement that adjectives like *atrosanguineus* and *albovariegatus* are against the rules of Latin grammar is not justified, for we find in classical Latin words like *albogilvus*, *albogalerus*, *primogenitus*, *sacro-sanctus*, *sacrovir*, *novocomensis*, *Laurolavinium*.²

These compounds have been widely used in botanical Latin for about two hundred years, in names as well as in Latin descriptions; if they should be considered incorrect as epithets in botanical names, all compounds like *ovato-lanceolatus*, *fulvo-tomentosus*, *stipitato-glandulosus* commonly used in descriptions would be formed wrongly and should be changed. These compounds probably have their origin partly in descriptive phrases like "foliis ex albo variegatis" (cf. Weston, Bot. Univ. 1: 266. 1770).

That Note 2 or Recommendation XLIV does not refer to the cases cited above, may be inferred from the fact that no examples referring to such compounds are given; only compounds are cited like *opuntiaeflorus* which should be changed to *opuntiaeflorus*.

Anyway, Note 2 does not seem to belong under the Rules, since it speaks of an orthographic error which *may* be corrected, therefore a correction is not obligatory as it should be if it were a rule. The case seems to be taken care of properly by Recommendation XLIV.

RECOMMENDATION XLIII

Specific (or other) epithets should be written with a small initial letter except those which are derived from names of persons (substantives or adjectives), or are taken from generic or vernacular names (substantives or adjectives). (See Synopsis of Proposals (1935), p. 55 "Rec. B. XLIII — Proc. 6th Intern. Bot. Congr. 1: 356.)

PROPOSED CHANGE

Specific (or other) epithets should be written with a small initial letter except those which are derived from names of persons (substantives or adjectives), or are taken from generic names (*pre-Linnacan* and *post-Linnacan*), or from vernacular names.

¹cf. Mitt. Deutsch. Dendr. Ges. 37: 203-204 (1927) and "Gesamtverzeichnis" 40 (1928) where numerous similar changes have been made and indicated as representing the correct spelling. (See also the writer's note in op. cit. 38: 333-336.)

²In these cases, however, as Dr. A. S. Pease, Professor of Latin, pointed out to the writer citing Kühner-Holzweissig, Ausführl. Gram. Lat. Sprache, 1: 1031, the vowel *o* is not to be considered a connecting vowel, but belongs to the stem of the second declension.